

ZOOGEOGRAPHICAL REVIEWS

Co-operative ornithology and conservation
in Western Europe

by E. M. Nicholson

It is more than a century since Hungary set up the world's first Scientific Institute for ornithology, and not much less since informal talks in Vienna, led by German agriculturalists and foresters, resulted in the first of the International Ornithological Congresses (I.O.C.), preoccupied with bird protection. Only at the turn of the century, with the 3rd Congress in Paris, did the centre of gravity begin to shift to Western Europe and only during the 1920's did the few earlier pioneering co-operative investigations lead to a start towards permanent organisation. It began in London, but on American initiative, with the establishment in 1922 of the International Committee (now Council) for Bird Preservation, so magnificently served by Phyllis Barclay-Smith from 1924 until her death this New Year. Early ringing schemes and bird observatories such as Heligoland and Rossitten had opened the eyes of gifted young ornithologists such as Landsborough Thomson to the potential of organised ornithology. The idea spread through discussion at meetings, encouragement by such journals as H. F. Witherby's *British Birds*, and field trials.

It seems that a main stimulus to extending co-operative investigations beyond bird-marking was given by the 1908 irruption from Russia across western Europe of Pallas's Sandgrouse *Syrhaptes paradoxus*, quickly followed by that of the Crossbill *Loxia curvirostra*. These were reported on by von Tschusi in Germany, and in *British Birds*, but the resulting movement was almost nipped in the bud by World War I. It was haltingly resumed in the 1920's with the path-finding Oxford Expeditions to Spitsbergen and the building up by F. C. R. Jourdain and B. W. Tucker of the Oxford Ornithological Society, through which the present writer organised the Oxford Bird Census in 1927 and, with that springboard, the 1928 *British Birds* national census of heronries in 1928.

The success of these ventures in attracting active participants made possible in the 1930's the creation of twin focal points: the Edward Grey Institute, professionally oriented, and the amateur-based British Trust for Ornithology, whose membership was increased and trained to higher standards by a systematic series of national co-operative investigations into the spread of the Great Crested Grebe *Podiceps cristatus*, the status of the Woodcock *Scolopax rusticola*, the habitat of the Lapwing *Vanellus vanellus* and many more. An accompanying offshoot was the British network of bird observatories, experimentally tested by the Oxford Trapping Station from 1927, then taken up by R. M. Lockley at Skokholm, by Scottish ornithologists at the Isle of May and enthusiastically developed elsewhere under the guidance of W. B. Alexander, first Director of the Edward Grey Institute.

In France there was simultaneously established in 1930 a Service Central de Recherches sur la Migration des Oiseaux, but it was concentrated upon providing rings, registering recoveries and initiating sub-stations for bird-marking studies. Its Director, M. A. Chapellier, was however the first to call attention to the growing number of ornithological stations in Europe,

of which he counted in *L'Oiseau* examples in 24 countries. He proposed the promotion of closer collaboration between these by means of an international co-ordinating body, which was only to come into being some two decades later in the shape of EURING.

These trains of thought were stimulated by the fortunate coincidence that the 8th I.O.C. was held in 1934 in Oxford, where it enabled a wide range of world ornithologists to see and discuss what was being done and planned there. Among fruitful contributions to this theme was that of Dr. J. Schenk of Hungary, who reminded the Congress that on such matters as migration field ornithologists must first find the facts and then pass them to laboratory ornithologists for evaluation. In Central Europe, as in the United States, the stimulus for organised investigations had come partly from the attempt to discover which birds were beneficial and which harmful to agriculture — a simplist approach which modern ecology has largely outdated.

Bird protection 40-50 years ago was deeply preoccupied with legislation, and to a less extent with educating the young. Resources available were extremely scanty, and a priority claim to them was the employment of watchers at sites where rare birds were especially vulnerable to disturbance or to robbery by egg-collectors, from Shetland to Dungeness and to the Welsh Kite *Milvus milvus* country. Several species, including the Kite and the Great Skua *Stercorarius skua* were probably saved from extinction in Britain by these measures. The menace of oil pollution at sea was also realistically evaluated, but not effectively checked. Although much dedicated and useful work was done, the whole movement was internally split and had little understanding of or contact with any kind of research. The internationally leading figure, Dr. Lönnerberg of Sweden, was somewhat preoccupied with the risk that overshooting and other adverse factors would lead to the extinction of certain waterfowl, as had occurred with the Labrador Duck in North America. The bodies convened to examine and deal with that aspect inevitably overlapped and fell foul of wildfowlers who saw things otherwise.

While World War I had slaughtered promising young ornithologists in dozens, and disillusioned or sidetracked others, the different character of World War II had an opposite effect. Many keen bird-watchers found themselves marooned for long periods at remote airfields, ports or radar stations with no alternative leisure pursuit, and willy-nilly turned to more serious field ornithology. Flying officers escorting Atlantic convoys could keep an eye successively on movements of U-Boats and of oceanic birds. Even prisoner-of-war camps became hives of organised intensive study of their bird life, guided by eminent ornithological colleagues who happened at the time to be enemy nationals. How far such experiences were common to other European nationals is not clear; it certainly revolutionised the situation in Britain. Hundreds of young men and a number of young women came out of the Forces after the war keen to pursue this new interest. Most of them had considerable talents and qualifications in some science or profession, or simply in getting things done resourcefully and without fuss. These endowments, however, did not instantly relate to ornithology or conservation, for which they were raw recruits. Some experienced ornithologists viewed with alarm the risks of ornithology being swamped by a tidal wave of ignorant newcomers, and were ready to build stockades against them. Those of us who were then leading the British Trust for Ornithology felt

that the difficulties, however formidable, were outweighed by the great potential of this windfall of young but seasoned volunteers. In order to take the strain we rushed through a new decentralised regional structure, took on a full-time secretary whom we were told the Trust could not afford, and set about educating and training the new intake. It worked, aided by such new tools as well-informed radio programmes, largely by James Fisher, explanatory volumes in the New Naturalist volumes, and eventually the pocket field-guides, the first of which by Roger Tory Peterson, Phil Hollom and Guy Mountfort was soon rivalling the Bible in its range of European translations and sales.

However, as we were to find at the first post-war I.O.C. at Upsala in 1950, Britain was not alone in this upsurge. In Sweden itself the Sveriges Ornithogiska Forening, founded only 5 years earlier, had already 1500 members and had built and successfully operated the famous Ottenby station for migration research. France also was fast expanding its ornithological cadre, and had called into play the outstanding ornithological resources of the Camargue in terms both of conservation and research.

About this time also the Netherlands were coming to the peak of an outstanding and many-sided contribution to the advance of ornithology, and among other smaller countries Switzerland also, as was manifest at the Basle I.O.C. in 1954, had made rapid strides. Space permits the mention of only one further country, Spain, which only got going about a decade ago, but bids fair to become one of the leading ornithological nations in Europe before the century ends.

Since World War II the progress of national ornithological growth has enabled and encouraged closer institutional collaboration in such fields as bird-marking, reserve management techniques and lately, perhaps most conspicuously, in the rapid co-ordinated progress made in many countries with national Atlases of Breeding Birds, on the model of that produced by the British Trust for Ornithology in 1976.

As European ornithology has progressed in its internal integration it has become able to take a larger part in the advance of biological studies generally, aided by the matchless quantity of detailed field data which it has been able to accumulate. Indeed that quantity has at times threatened to saturate the absorptive and digestive capacity of the users, and has challenged the capacity even of the numerous and expert Anglo-Dutch team currently working to present it in succinct form in the 7-volume *Birds of the West Palearctic, or Birds of Europe, the Middle East and North Africa*, as some prefer to call it. Just as Witherby's great *Handbook*, which it succeeds, was simultaneously matched in Niethammer's *Vogelkunde*, so this new standard work in English is appearing in step with the Glutz *Handbuch der Vogel Mitteleuropas*, providing more extended treatment for a more restricted field. Together, these works should provide European ornithologists with a firm base for renewed critical studies, and should for others give access to the riches of already acquired ornithological knowledge, which might otherwise have remained inaccessible to them.

So much has been done and learned that to attempt to cover it in the space here available seems absurd. Any such account must be superficial, unbalanced, subjective and full of holes. Yet at least it brings together within easy compass some kind of summary of a period of growth, still

within living memory, which has undoubtedly revolutionised ornithology. Perhaps most remarkable is the fact that in this period ornithology has successfully reaffirmed its role as a science — perhaps the last science — in which amateurs as well as professionals can play a creative part, complementing one another's contributions and together giving it a base of matchless breadth and variety. In no country is this demonstrated more fully and convincingly than in Britain, and in no country either is the conservation of birds conducted on a firmer or more comprehensive scientific basis. Other European countries can also show equal achievements to be proud of in advancing modern European ornithology. Yet perhaps the aspect of which all can least be proud is the continuing inadequacy of efforts to combine the strength and to make good the weakness of the component parts of European ornithology.

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Ornithological advances in Western Europe during the last 50 years

by *Einhard Bezzel*

The development of ornithology in the last decades could not be better described than by the remark of E. Stresemann in his *Ornithology from Aristotle to the Present*: "... the barriers that protected our special field of knowledge were demolished on all sides. Ornithology has progressed with such breathtaking speed that nothing important can be achieved in it nowadays except by keeping up with the pace, without losing sight of the whole."

The amount of knowledge has increased exceedingly even if we only consider the history in Western Europe. With N. Tinbergen and K. Lorenz, ornithology even played a basic part in the award of a Nobel Prize in 1973. Comparative ethology has been one of the new fields in causal research on birds which has become important beyond the barriers of ornithology.

Ethology as a separate scientific discipline started with studies on the behaviour of corvids, gulls or ducks by N. Tinbergen and K. Lorenz, the latter referring to earlier studies of O. Heinroth in the first decade of this century. Pioneer studies of E. Selous, J. S. Huxley or A. Kortland and some others should be mentioned here as well. Nowadays we find many aspects of bird behaviour studied by the aid of complicated techniques, such as the analysis of the great diversity of behaviour patterns, the description and analysis of bird songs and their function (e.g. E. A. Armstrong, W. H. Thorpe, G. Thielcke), or studying the way in which birds use food resources, construct their nests, act and react against enemies or competitors, etc. The result of such studies provides many new ideas for the understanding of how evolution works or how birds are adapted to their environment.

In many fields of ornithology the pioneer work of single ingenious and enlightened persons has built the basis for modern research methods, which are characterized by the teamwork of scientists and ever increasing help from new techniques in both the laboratory and in the field. Ornithology in different countries and regions has been encouraged and developed, in fact, mainly by a few ornithologists who initiated a rich and thorough research, even in those regions with a poorly developed ornithological tradition.